WHAT IS CLAIMED IS:

1. A method for fabricating a semiconductor device comprising the steps of:

forming, on a substrate, a first insulating film with a relatively low dielectric constant and low mechanical strength;

patterning said first insulating film through selective etching using a first mask pattern formed on a first region of said first insulating film;

forming, on said substrate, a second insulating film with a relatively high dielectric constant and high mechanical strength;

forming a thinned portion of said second insulating film on said patterned first insulating film by planarizing said second insulating film by polishing;

forming a first interconnect groove in said thinned portion of said second insulating film and said patterned first insulating film through selective etching using a second mask pattern formed on said planarized second insulating film; and

forming a buried interconnect in said first interconnect groove.

2. The method for fabricating a semiconductor device of Claim 1, further comprising a step of forming, on said buried interconnect, a third insulating film for preventing

diffusion of a metal included in said buried interconnect.

3. The method for fabricating a semiconductor device of Claim 1,

wherein both of said first insulating film and said second insulating film include inorganic materials as principal constituents, and

the step of forming said first interconnect groove includes a sub-step of forming a second interconnect groove in a second region of said planarized second insulating film through selective etching using said second mask pattern.

4. The method for fabricating a semiconductor device of Claim 1,

wherein said first insulating film includes an organic material as a principal constituent and said second insulating film includes an inorganic material as a principal constituent, and

the step of forming said first interconnect groove includes a sub-step of forming a second interconnect groove in a second region of said planarized second insulating film through selective etching using said second mask pattern in forming an upper portion of said first interconnect groove in said thinned portion of said second insulating film through the selective etching using said second mask pattern.

5. The method for fabricating a semiconductor device of Claim 4,

wherein the step of forming said first interconnect groove includes a sub-step of removing said second mask pattern in forming a lower portion of said first interconnect groove in said first insulating film through the selective etching using said second mask pattern.

6. The method for fabricating a semiconductor device of Claim 1,

wherein said thinned portion of said second insulating film has a thickness of 10 nm through 50 nm.